

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A portal for use in a spinal implantation procedure comprising:
a base;
a first paddle that is pivotally coupled to the base; and
a second paddle that is pivotally coupled to the base, wherein the first paddle and the second paddle are dimensioned to fit in a disc space between two adjacent vertebrae of a spine of a patient, and further wherein the first paddle and the second paddle are connected to the base such that the first paddle and the second paddle are pivotal about respective generally horizontal axes between an open position and a closed position, wherein, in the closed position the first paddle and the second paddle are both disposed in a generally horizontal orientation approximately parallel to the base, and in the open position the first paddle and the second paddle are both disposed in a generally vertical orientation approximately perpendicular to the base, such that the portal is configured to distract the two adjacent vertebrae apart in a direction generally perpendicular to a plane between the horizontal axes when the first paddle and the second paddle are in the open position.
2. (Original) The portal as in claim 1, wherein the first paddle has a height in the range of 4 to 18 mm, and the second paddle has a height in the range of 4 to 18 mm.
3. (Original) The portal as in claim 1, further comprising a first pivot hinge that connects the first paddle to the base, and a second pivot hinge that connects the second paddle to the base.
4. (Original) The portal as in claim 1, wherein the first paddle is coupled to one end of the base, and the second paddle is coupled to the opposite end of the base.

5. (Cancelled)

6. (Original) The portal as in claim 1, wherein the first paddle has rounded corners, and the second paddle has rounded corners.

7. (Original) The portal as in claim 1, wherein edges of the first paddle have surface irregularities, and edges of the second paddle have surface irregularities.

8. (Previously Presented) The portal as in claim 7, wherein the surface irregularities of the first paddle comprise serrations, and the surface irregularities of the second paddle comprise serrations.

9. (Original) The portal as in claim 1, wherein the first paddle comprises a first lordotic paddle, and the second paddle comprises a second lordotic paddle.

10. (Original) The portal as in claim 1, wherein the first paddle comprises a first radiolucent paddle, and the second paddle comprises a second radiolucent paddle.

11. (Currently Amended) A portal for use in distracting adjacent vertebrae, the portal comprising:

first and second paddles, the paddles having heights sized to correspond to a desired distraction spacing between the adjacent vertebrae, and thicknesses sized to permit insertion of the paddles between the vertebrae prior to distraction of the adjacent vertebrae; and

a bridge member supporting the first and second paddles in spaced relationship, the first and second paddles moving relative to the bridge about respective generally horizontal axes between a closed position and an open position, the first paddle and the second paddle being disposed in a generally horizontal orientation in the closed position and in a generally vertical orientation in the open position such that the portal is configured to distract the adjacent vertebrae apart in a direction generally perpendicular to a plane between the

horizontal axes, wherein the paddles are adapted for insertion between the adjacent vertebrae prior to distraction when in the closed position, and the paddles are adapted to maintain the desired distraction spacing between the adjacent vertebrae when in the open position.

12. (Cancelled)

13. (Cancelled)

14. (Original) The portal of claim 11, wherein the paddles and the bridge member cooperate to define a portal window when the paddles are in the open position, the portal window defining a sight line into an intervertebral space defined between the adjacent vertebrae.

15. (Original) The portal of claim 14, wherein the paddles include distracter portions that project outwardly from the bridge member in a direction that extends along the sight line of the portal window.

16. (Original) The portal of claim 11, wherein the heights of the paddles are in the range of 4-18 mm, and the thicknesses of the paddles are in the range of 1-2 mm.

17. (Cancelled)

18. (Currently Amended) A portal for use in a spinal implantation procedure comprising:
a base having a length between a first end and an opposite second end;
a first paddle sized to fit in a disc space between two vertebrae, the first paddle having a first edge, a second edge, and a third edge, and a fourth edge, wherein the first edge is approximately parallel to the second edge, the third edge is approximately parallel to the fourth edge, and the first edge is approximately perpendicular to the third edge, wherein the first paddle has a width between the third edge and the fourth edge, and a length between the first edge and the second edge, wherein the first paddle is pivotally coupled to the first end of

the base and pivotally moves about a generally horizontal axis between a first position and a second position, and wherein the first paddle is disposed in a generally horizontal orientation so as to be approximately parallel to the base when the first paddle is in the first position, and the first paddle is disposed in a generally vertical orientation so as to be approximately perpendicular to the base when the first paddle is in the second position;

a second paddle sized to fit in the disc space between two vertebrae, the second paddle having a first edge, a second edge, a third edge, and a fourth edge, wherein the first edge of the second paddle is approximately parallel to the second edge of the second paddle, the third edge of the second paddle is approximately parallel to the fourth edge of the second paddle, and the first edge of the second paddle is approximately perpendicular to the third edge of the second paddle, wherein the second paddle has a width between the third edge and the fourth edge, and a length between the first edge and the second edge, wherein the second paddle is pivotally coupled to the second end of the base, and the second paddle pivotally moves about a generally horizontal axis between a first position and a second position, wherein the second paddle is disposed in a generally horizontal orientation so as to be approximately parallel to the base when the second paddle is in the first position, and the second paddle is disposed in a generally vertical orientation so as to be approximately perpendicular to the base when the second paddle is in the second position;

wherein the portal is configured to distract the two vertebrae apart in a direction generally perpendicular to a plane between the horizontal axes.

19. (Original) The portal as in claim 18, wherein the first paddle and the second paddle are approximately parallel to each other when the first paddle and the second paddle are in the second position.

20. (Original) The portal as in claim 18, wherein portal has a spacing of 11-33 mm between the paddles when the paddles are open, and wherein the paddles each have a height in the range of 4-18 mm, a distraction length in the range of 12-30, and a thickness in the range of 1-2 mm.

21. (Currently Amended) A spinal distractor system comprising:

a flip-up portal comprising a base, a first paddle, and a second paddle, the first paddle and the second paddle moving about respective generally horizontal axes between open and closed positions, the first and second paddles being disposed in a generally horizontal orientation so as to be approximately parallel to the base when in the closed position and the first and second paddles being disposed in a generally vertical orientation so as to be approximately perpendicular to the base when in the open position; and

an actuator for insertion of the flip-up portal into a disc region between two vertebrae, the actuator including at least one handle that is rotated to move the first and second paddles from the closed position to the open position;

such that the portal is configured to distract the two vertebrae apart in a direction generally perpendicular to a plane between the horizontal axes.

22. (Original) The spinal distractor system as in claim 21, wherein the actuator further comprises:

a first receiver for receiving an end of the first paddle, and a first shaft that connects the first receiver to the first handle;

a second receiver for receiving an end of the second paddle, and a second shaft for connecting the second receiver to the second handle; and

a collar that couples the first and second shafts together.

23-27. (Cancelled)

28. (Currently Amended) A portal for use in distracting adjacent vertebrae, the portal comprising:

first and second paddles, the paddles having heights sized to correspond to a desired distraction spacing between the adjacent vertebrae, and thicknesses sized to permit insertion of the paddles between the vertebrae prior to distraction of the adjacent vertebrae; and

a bridge member supporting the first and second paddles in spaced relationship, the first and second paddles moving relative to the bridge about respective generally horizontal axes between a closed position and an open position, the first paddle and second paddle being disposed in a generally horizontal orientation in the closed position and in a generally vertical orientation in the open position, wherein the paddles are adapted for insertion between the adjacent vertebrae prior to distraction when in the closed position, and the paddles are adapted to maintain the desired distraction spacing between the adjacent vertebrae when in the open position, and further wherein the paddles each include major surfaces that face towards the bridge member when the paddles are in the closed position, and that face toward each other when the paddles are in the open position;

such that the portal is configured to distract the adjacent vertebrae apart in a direction generally perpendicular to a plane between the horizontal axes.

29. (Currently Amended) A portal for use in distracting adjacent vertebrae, the portal comprising:

first and second paddles, the paddles having heights sized to correspond to a desired distraction spacing between the adjacent vertebrae, and thicknesses sized to permit insertion of the paddles between the vertebrae prior to distraction of the adjacent vertebrae; and

a bridge member supporting the first and second paddles in spaced relationship, the first and second paddles moving relative to the bridge about respective generally horizontal axes between a closed position and an open position, the first paddle and second paddle being disposed in a generally horizontal orientation in the closed position and in a generally vertical orientation in the open position, wherein the paddles are adapted for insertion between the adjacent vertebrae prior to distraction when in the closed position, and the paddles are adapted to maintain the desired distraction spacing between the adjacent vertebrae when in the open position, and further wherein the paddles are generally parallel to the bridge member when in the closed position, and generally perpendicular to the bridge member when in the open position;

such that the portal is configured to distract the adjacent vertebrae apart in a direction generally perpendicular to a plane between the horizontal axes.